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Acer AL1913c
Service Guide

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Conventions

The following conventions are used in this manual:

Screen messages	Denotes actual messages that appear on screen
Note	Gives bits and pieces of additional information related to the current topic.
Warning	Alerts you to any damage that might result from doing or not doing specific actions.
Caution	Gives precautionary measures to avoid possible hardware or software problems.
Important	Reminds you to do specific actions relevant to the accomplishment of procedures.

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Preface

Before using this information and the product it supports, please read the following general information.

1. this Service Guide provides you with all technical information relating to the BASICCONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. please not WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide, for ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and Service of customer machines.

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WARNING: (FOR FCC CERTIFIED MODELS)

NOTE: this equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, Which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

WARNING

Use only shielded signal cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

As an ENERGY STAR® Partner our company has determined that this product meets the ENERG STAR® guidelines for energy efficiency.

WARNING:

To prevent fire or chock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

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PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, Swimming pool or in a wet basement.

- Do not place the monitor on an unstable trolley, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a trolley or stand recommended by the manufacture or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacture and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet area provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Unplug the unit during a lightning storm or when it will not be used for long periods of time. This will protect the monitor from damage dus to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC, Min. 3.5A.
- The wall socket shall be installed near the equipment and shall be easily accessible.
- For use only with the attached power adapter (output 12V DC) which have UL,CSA listed license

SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitor and do not indicate a problem.

NOTES

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness in the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.

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Monitor Features

Chapter 1

1.1 Test Conditions

Item	Condition
Temperature	Normal room temperature (25 2)
Humidity	50 10%
AC input voltage	100V 2V, 120 2V, 60Hz / 240 2V, 50Hz
Brightness	Maximum with OSD setting
Contrast	Middle with OSD setting
Resolution setting	1280 x 1024 @60HZ
Color temperature	With OSD setting
Measuring instrument	Topcon luminance colorimeter BM-5A or equivalent
Others	Before measuring, "Auto Adjust" & "Auto Balance" must be done in advance

1.2 Features

- 19" SXGA TFT LCD Panel
- MVA Mode Liquid Crystal
- D-SUB/ DVI-D Input
- Audio Function
- Support to 75Hz Refresh Rate
- Support VESA-DCC 2B plug & play function
- Support VESA-DPMS & DVI DMPM Power Management Function
- Super Wide Viewing Angle
- High Brightness & Contrast Ratio
- High Brightness & Contrast Angular Dependent
- Fast LC Response Time
- Light Weight

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1.3 LCD panel Specification

Technical Specifications

LCD Panel (Back Light Source)	**Panel Dimension**	Diagonal 481.9mm (19 inch) LCD display
	Max. Resolution	1,280 x 1,024/ SXGA
	Max. Pixel	Up to 16.2M true color
	Pixel Span	Horizontal 0.294mm x Vertical 0.294mm
	Brightness	300 cd/m^2
	Contrast	800 : 1
	LC Response Time	23ms
	Visual Angle	Horizontal 170° / Vertical 170°
	Effective Display	Horizontal 376.32mm x Vertical 301.056mm
Input Signal	**Signal Mode**	Simulated video frequency: 0.7 Vpp, 75Ω (separate SYNC and composite SYNC)
	SYNC Frequency	Horizontal 30kHz~82kHz x Vertical 56Hz ~76 Hz
	Max. Pixel Clock	135MHz
Input Terminal	**Image**	D-Sub 15 PIN (VESA) / DVI-D (Optional)
	Audio	Phone Jack, d=3.5mm (Optional)
Power Transformer		AC100~240Volts, 50/60Hz
Power Consumption		65W / Standby 3W
Environmental Conditions	**Temperature**	5 ~ 35 (operation)/ -20 ~ 55 (storage)
	Humidity	20% ~ 80% (operation)/ 20% ~ 85% (storage)
Actual Dimension (W x D x H)		427 mm x 196mm x 429mm
Net Weight		4.5 kg
Safety Standard		TCO99;UL/CUL;TÜV-GS;CE/LVD;TÜV-ERGO;CB;CCC;FCC-B; VCCI-B;CE/EMC;C-Tick; BSMI; ISO 13406-2;EPA; PCT

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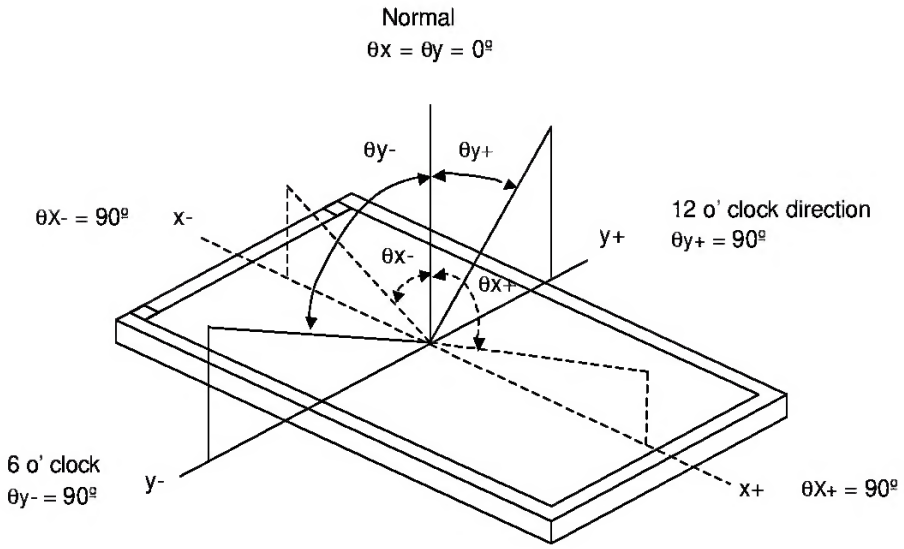
(1) Definition of Viewing Angle (θx, θy):



(2) Definition of Contrast Ratio (CR):

The contrast ratio can be calculated by the following expression and figure below.

Contrast Ratio (CR) = L255 / L0

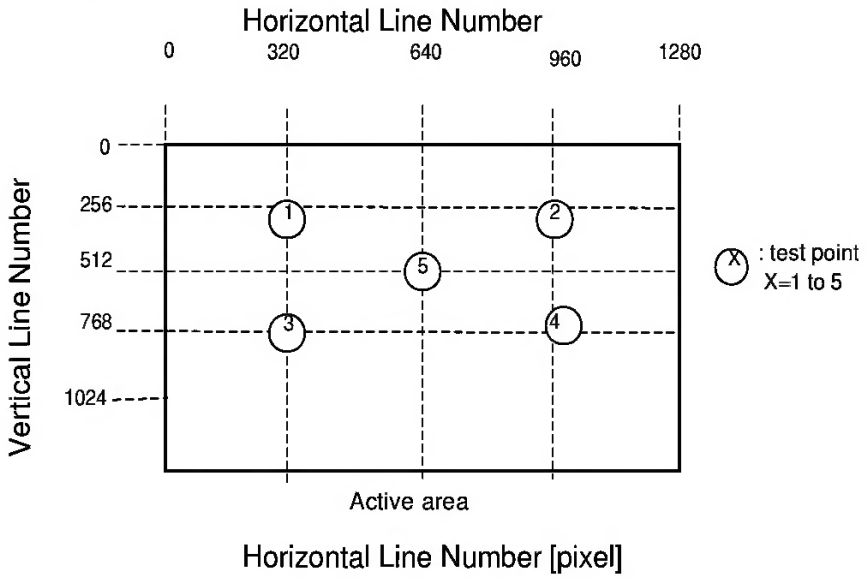
L255: Luminance of gray level 255

L 0: Luminance of gray level 0

CR = CR (5)

CR (X) is corresponding to the Contrast Ratio of the point X at Figure in Note (5).

Definition of luminance measured points and Brightness Uniformity:

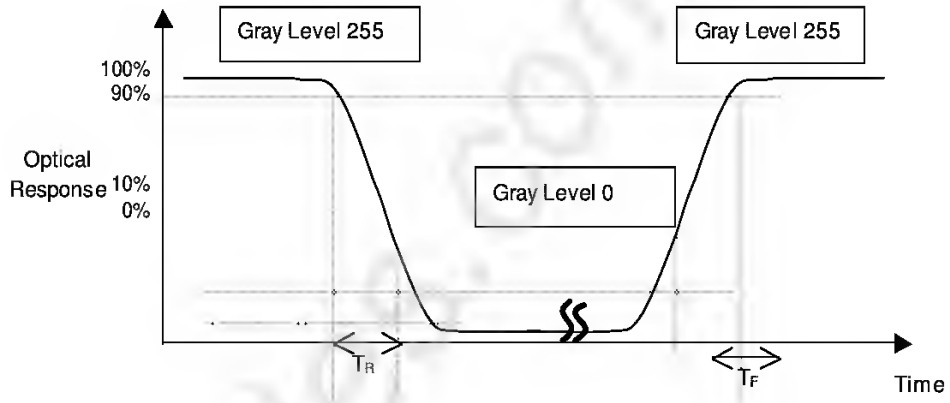


Luminance of center point: L=L(5)

Brightness Uniformity Measurement points: Five specified points 1-5

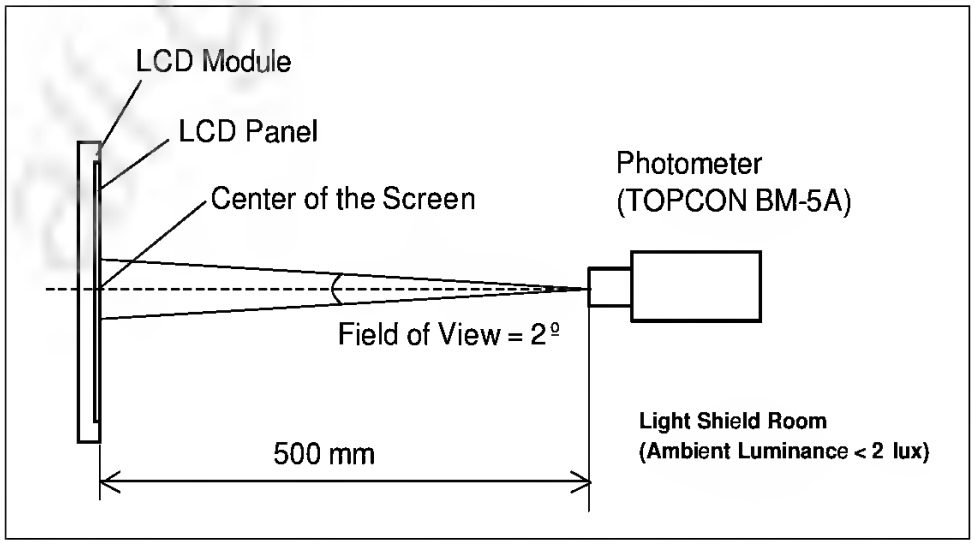
Formula: Maximum [L (1), L (2), L (3), L (4), L (5)]/Minimum [L (1), L (2), L (3), L (4), L (5)]

(3) Definition of Response Time (T_R, T_F):



(4) Measurement Setup:

The LCD module should be stabilized at given temperature for 20 minutes to avoid abrupt temperature change during measuring. In order to stabilize the luminance, the measurement should be executed after lighting Backlight for 20 minutes in a windless room.

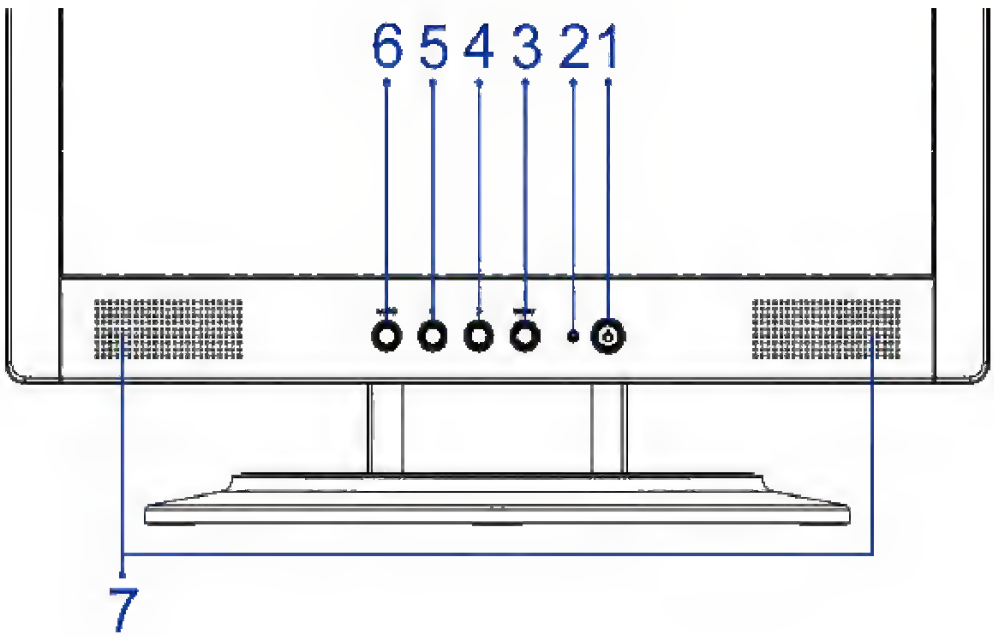


OPERATING INSTRUCTIONS

Chapter 2

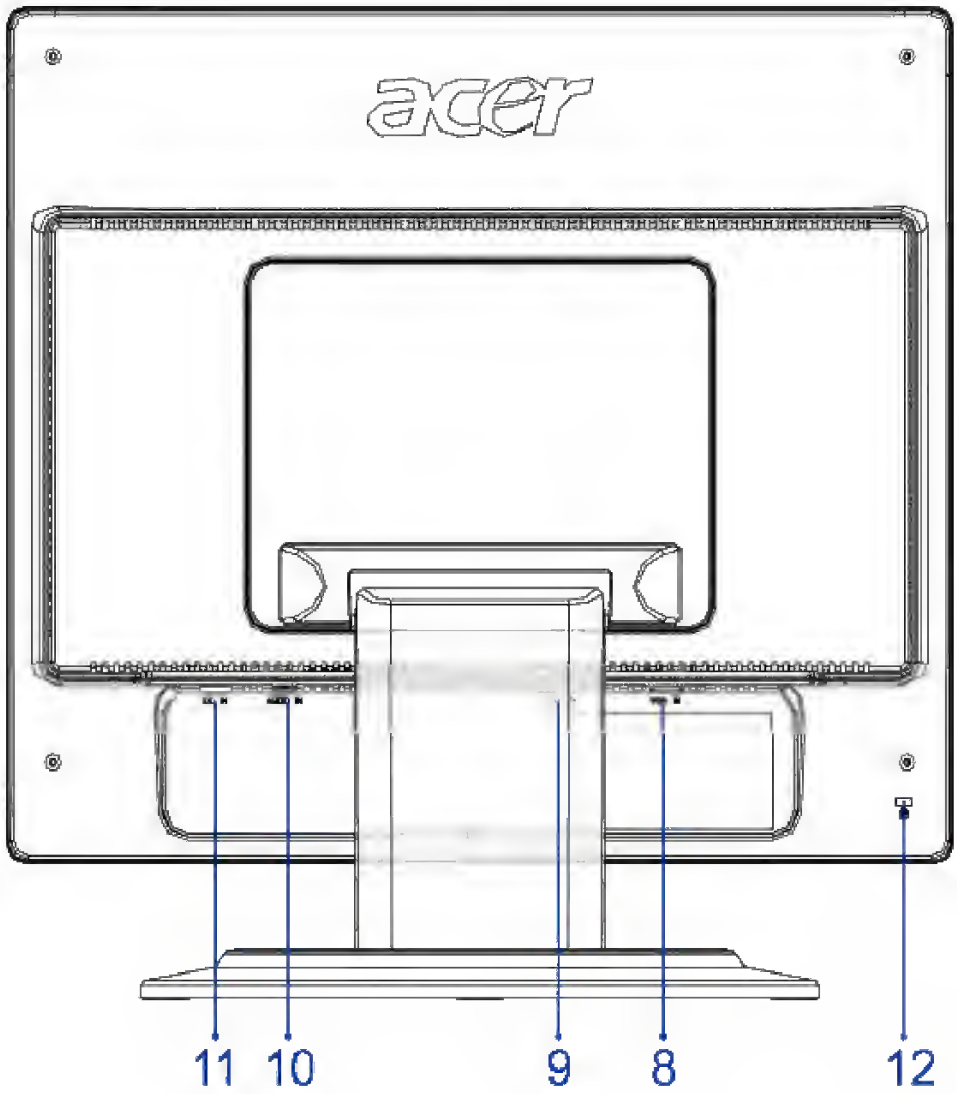
2.1 Function Name

2.1.1 Front



No.	Name	Descriptions	
1	Power Switch	Power On/Off	
2	LED Indicator	Green	Normal operation
		Orange	Power management
3	MENU	OSD control MENU button	
4	>	Right selection/ Volume button (AL1714m/AL1714bm)	
5	<	Left selection/ Volume button (AL1714m/AL1714bm)	
6	AUTO	Adjust Clock, Phase, H Position and V Position automatically	
7	Speaker	2.5W x 2	

2.1.2 Back



No.	Name	Descriptions
8	D-Sub	D-sub mini 15pin Connector
9	DVI	DVI-D 24pin Connector
10	Audio IN	Phone Jack 3.5
11	DC-In	DC Power Jack, d=3.0mm
12	Lock hole	Kensington

2.2 OSD Menu Description

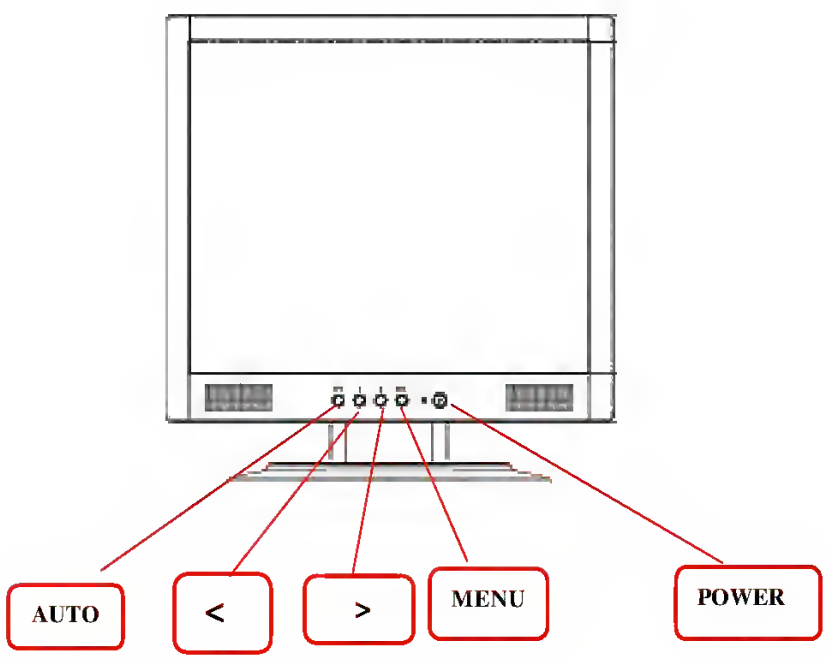
1. **POWER :** Press this key to control power ON/OFF of the Monitor.
   Green: normal display.
   Orange flicker: no signal input.
   Orange: power off.

2. **MENU :** Press this button to enter OSD. Press it again to exit OSD.

3. **>:** Press this button for selection or adjustment when OSD is shown.
   Press this button and click > to plus volume.

4. **<:** Press this button for selection or adjustment when OSD is shown.
   Press this button and click < to minus volume.

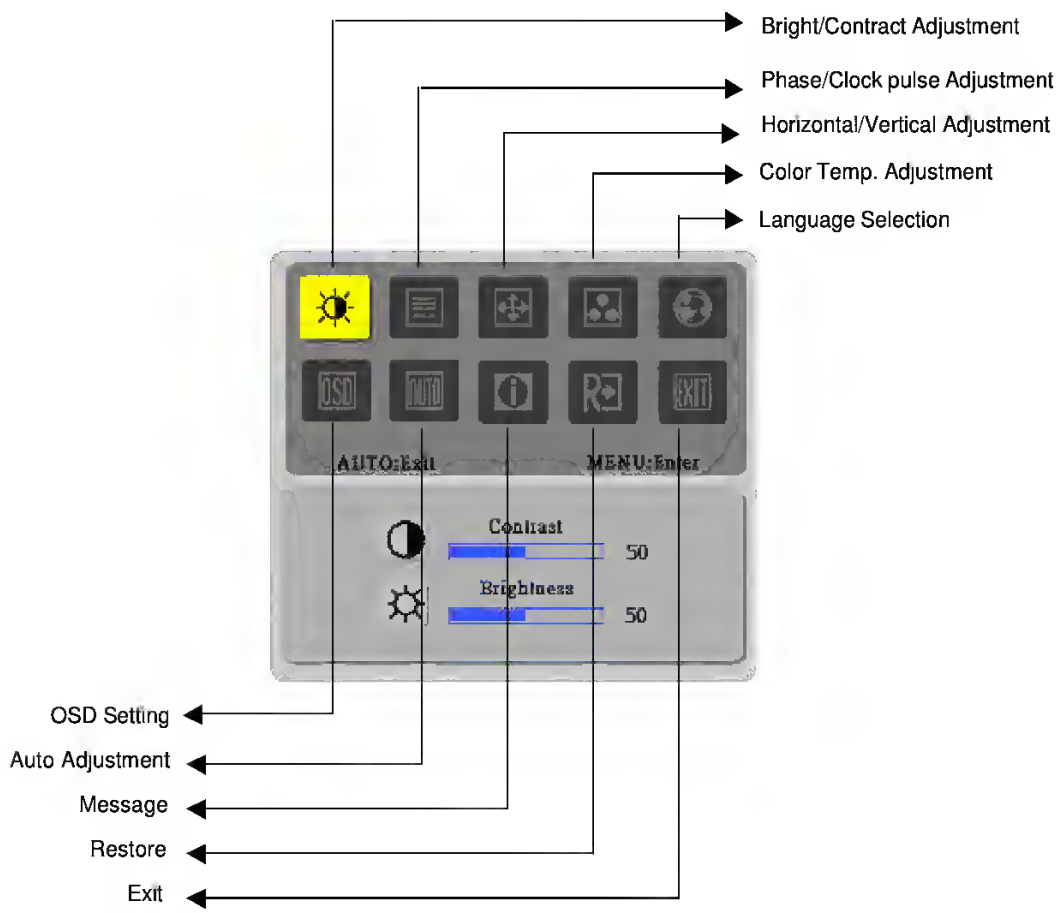
5. **AUTO:** Press this button to exit the manual when OSD is shown.
   Press this button for the display to optimize the position, phase and clock pulse automatically when OSD is not shown.



2.3 OSD Control

1. Click MENU to display the OSD window as shown in the following figure.
2. Click < or > to select the function to be adjusted as shown in the following figure.
3. Click the MENU to select the function to be adjusted.
4. Click < or > to change current settings.
5. To exit OSD, select "EXIT" to close the OSD window and save changes. To change other settings, repeat steps 2-4.

2.4 OSD Menu Screen



- The OSD disappears several seconds after you stop pressing the buttons while performing an adjustment.
- Any changes are automatically saved in the memory when the OSD disappears. Turning off the power should be avoided while using the menu.
- Adjustments for clock, phase and positions are saved for each signal timing. Except for these adjustments, all other adjustments have only one setting which applies to all signal timings.
- The color will change from white to pink while the function is selected.

2.5 OSD Function Definition

Primary Directory Symbo	Secondary Directory Symbol	Secondary Directory Items	Description
		Contrast	Adjust the contrast between the foreground and background of an image on the screen
		Brightness	Adjust the background brightness of the screen
		Phase	Adjust the focus of the image (for analog input adjustment only)
		Clock Pulse	Adjust the clock pulse of the image (for analog input adjustment only)
		Horizontal	Move the image left and right on the screen (for analog input adjustment only)
		Vertical	Move the image up and down on the screen (for analog input adjustment only)
	N/A	Warm Color Temp.	Set up the color temp. to be warm white color
	N/A	Cold Color Temp.	Set up the color temp. to be cold white color
		User Definition/Red	Adjust red/green/blue gain
		User Definition/Green	
		User Definition/Blue	
	N/A	**English**	Select the language you want
	N/A		
	N/A	**Deutsch**	
	N/A	**Français**	
	N/A	**Español**	
	N/A	**Italiano**	
	N/A	? ? ? ?	
	N/A		
		Horizontal	Move OSD left and right
		Vertical	Move OSD up and down
		OSD Time Display	Adjust OSD time display settings
	N/A	Auto Adjustment	Set up horizontal, vertical, sequence and focus automatically (for analog input only)
	N/A	Analog Digital	Select the input source you want (for DVI Input only)

	N/A	Message	Display resolution, H/V frequency and the input port used for current input timing function
	N/A	Restore	Restore to factory settings
	N/A	Exit	Close the OSD window and save changes

2.6 Plug and Play

- The new **VESA Plug and Play** function is used which eliminates the complicated and time-consuming installation process.
- You can use the **Plug and Play** system without encountering usual installation problems. Your computer system can easily identify and automatically adjust the monitor.
- The LCD Monitor uses **Display Data Channel (DDC)** to send **Extended Display Identification Data (EDID)** to the computer system, so the computer system can be set to monitor auto adjust.

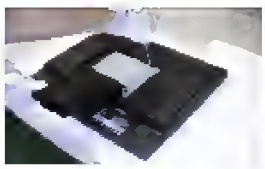
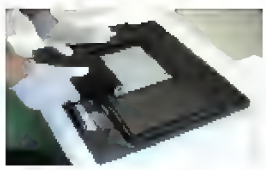
2.7 Power Saver

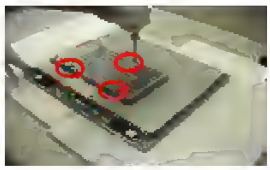
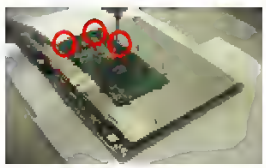
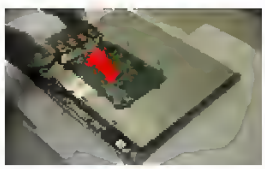
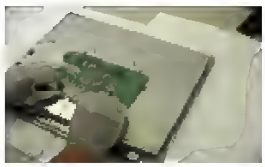
- Power control system, also called **(Power Saver)**, is installed inside the LCD Monitor.
- If the monitor has not been used for a certain period of time, the system will turn the monitor to low voltage mode to save power. Slight moving or any click will return to the original image.
- The VGA card inside the computer handles ***Power Saver***. You can use computer software to set the function.
- The LCD Monitor is compatible with EPA ENERGY STAR and NÜTEK if used with a VESA DPMS computer.
- To save power, turn off the power of the LCD monitor when not in use.

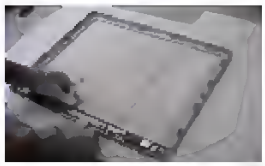
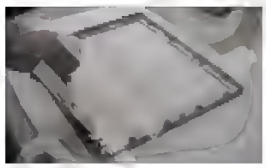
MACHINE DISASSEMBLY AND ASSEMBLY

Chapter 3

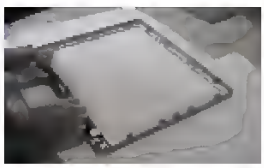
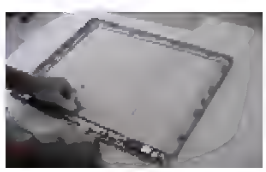
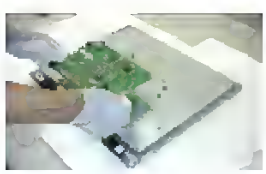
3.1 Disassembly Procedures

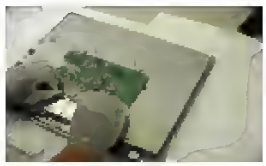
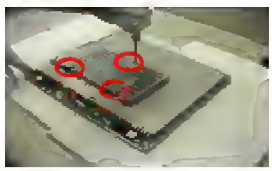
Picture	Description
	Push the hooks and stand bottom away
	Remove Hinge Cover
	Loosen and remove 4 screws
	Remove Stand Assy
	Loose and remove 5 screws.
	Separate Bezel hooks to take Bezel and Rear Cover apart.

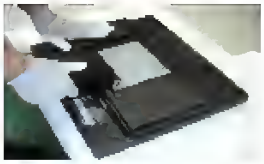
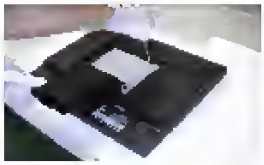
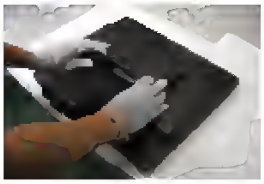
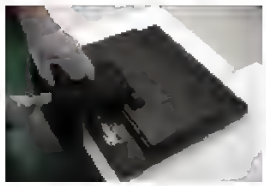
	Lift up Rear Cover
	Loose and remove 2 screws
	Loose and remove 3 screws
	Remove FFC
	Remove the Cover of X-PCB
	Loose and remove 3 screws
	Remove Power PCBA
	Remove 2 pieces of FFC from AD PCBA

	Loose and remove 4 screws
	Remove AD PCBA
	Lift up LCD module and remove bezel.
	Remove FFC.
	Separate both Audio Cable.
	Loose and remove 2 screws.
	Take OSD PCBA apart

3.2 Assembly Procedures

	Place OSD PCBA.
	Fasten 2 screws
	Insert Audit Cable to connectors of OSD PCBA
	Bezel assembly complete.
	Insert FFC.
	Place LCD module.
	Insert new AD PCBA

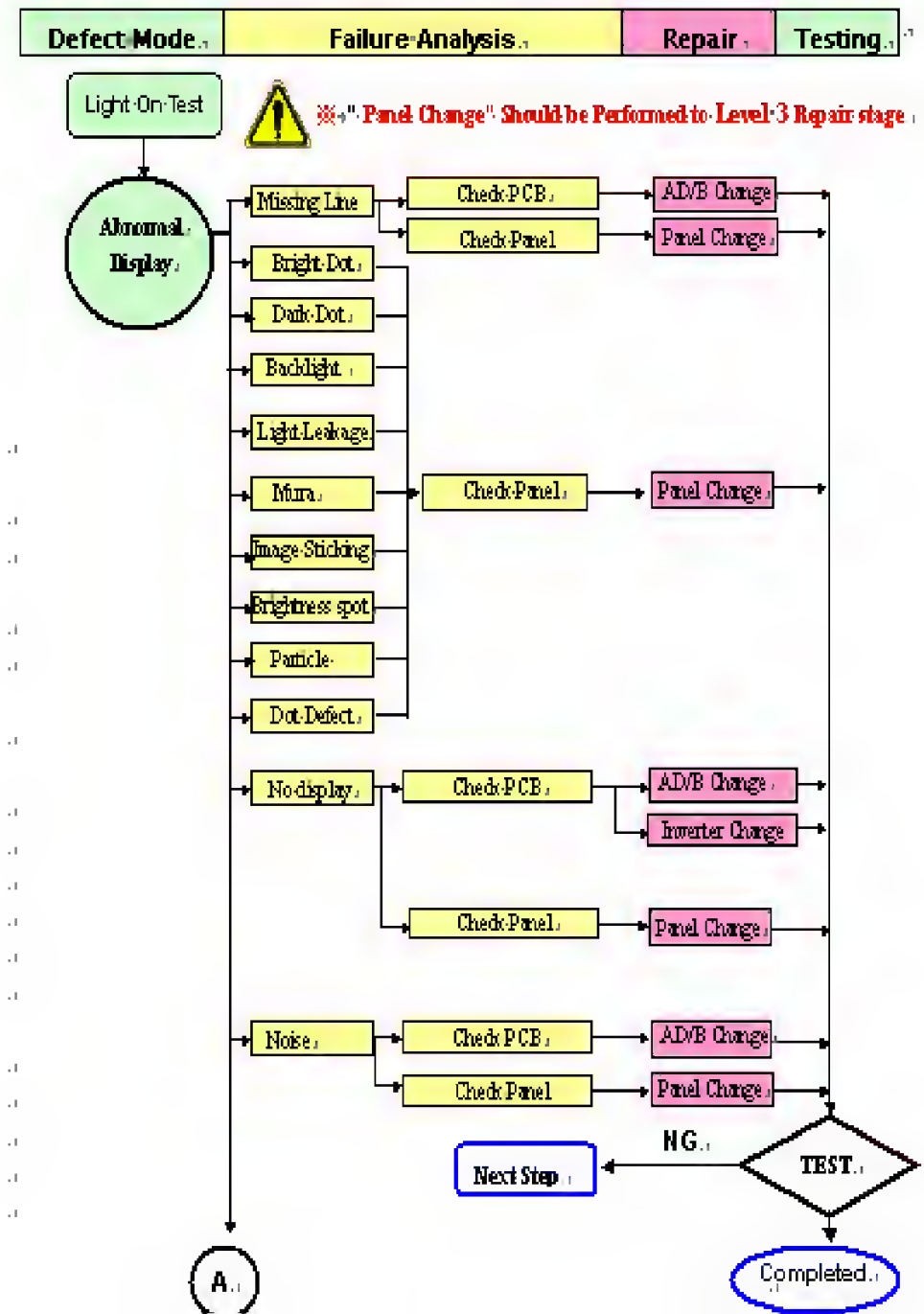
	Fasten 4 fixed screws of AD PCBA
	Insert 2 pieces of FFC to AD PCBA
	. Insert new Power PCBA
	Fasten 3 fixed screws of Power PCBA
	Join the cover hooks of X-PCB
	Fasten 3 screws
	Fasten 2 screws
	Insert FFC

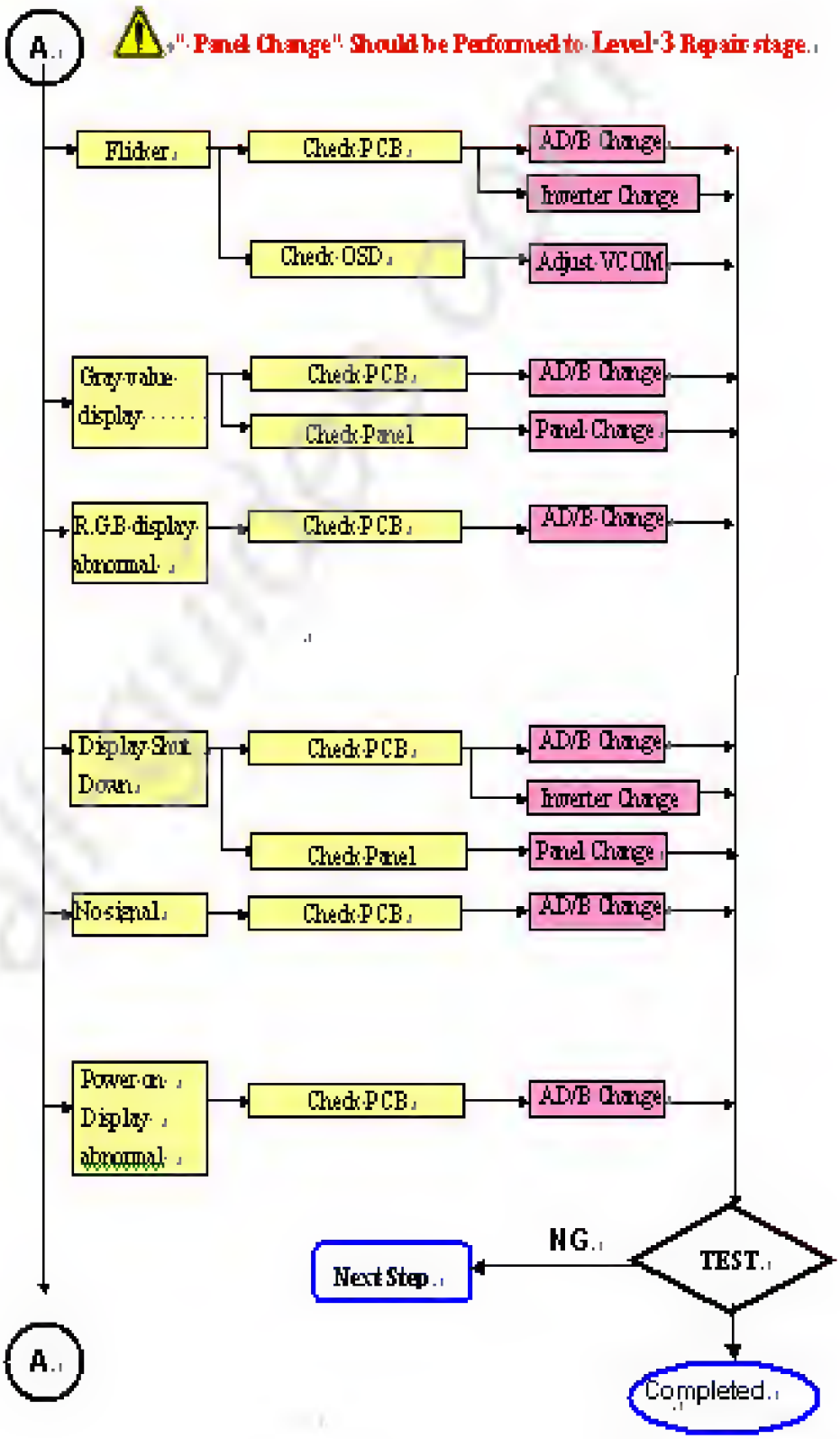
	Place Rear Cover
	Join hooks of Rear Cover with Bezel
	Fasten 5 screws
	Place Stand Assy.
	Fasten 4 screws
	Insert Stand Cover
	Have the hook latched

Troubleshooting

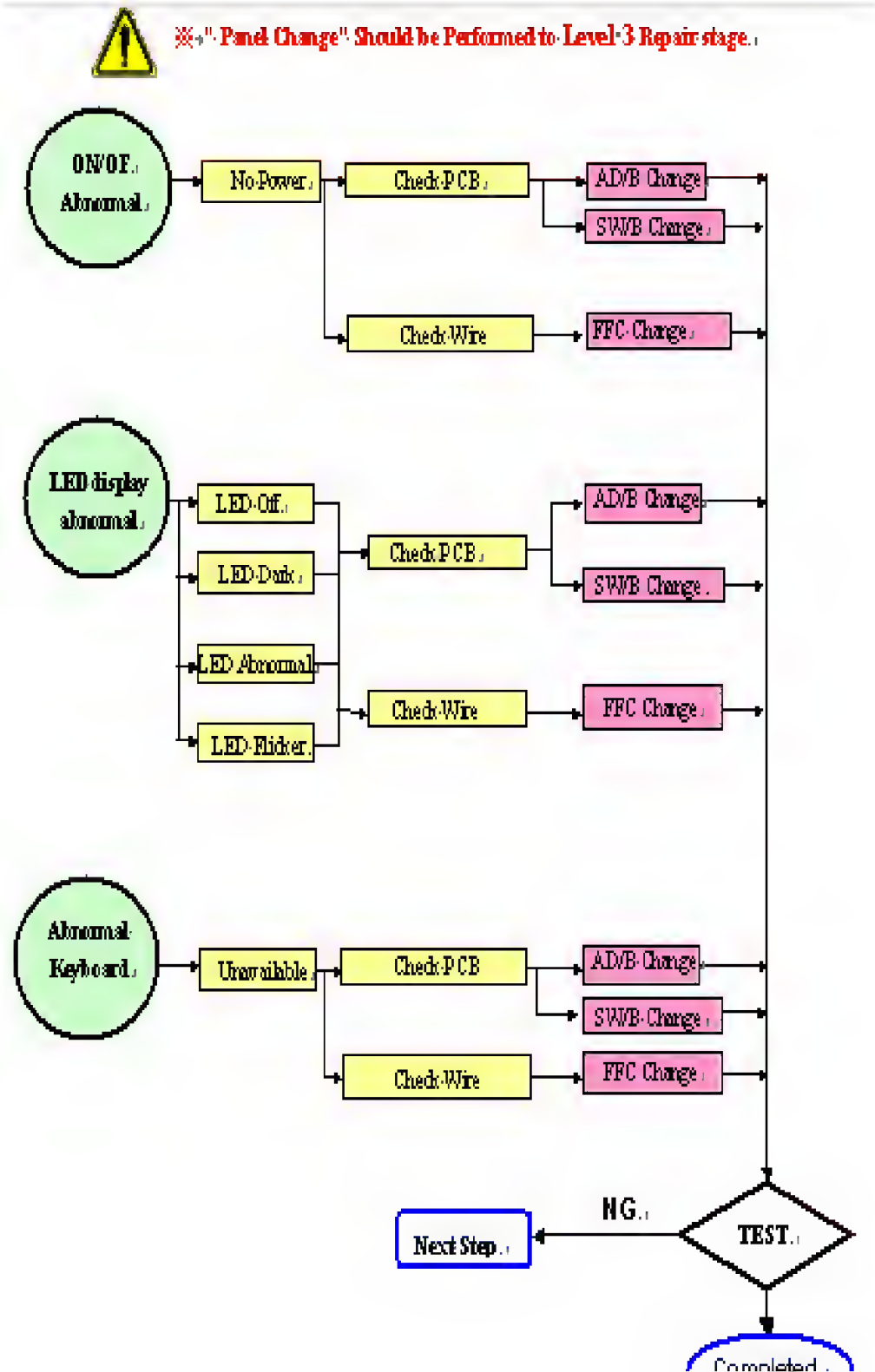
Chapter 4

4.1 Abnormal Display Troubleshooting



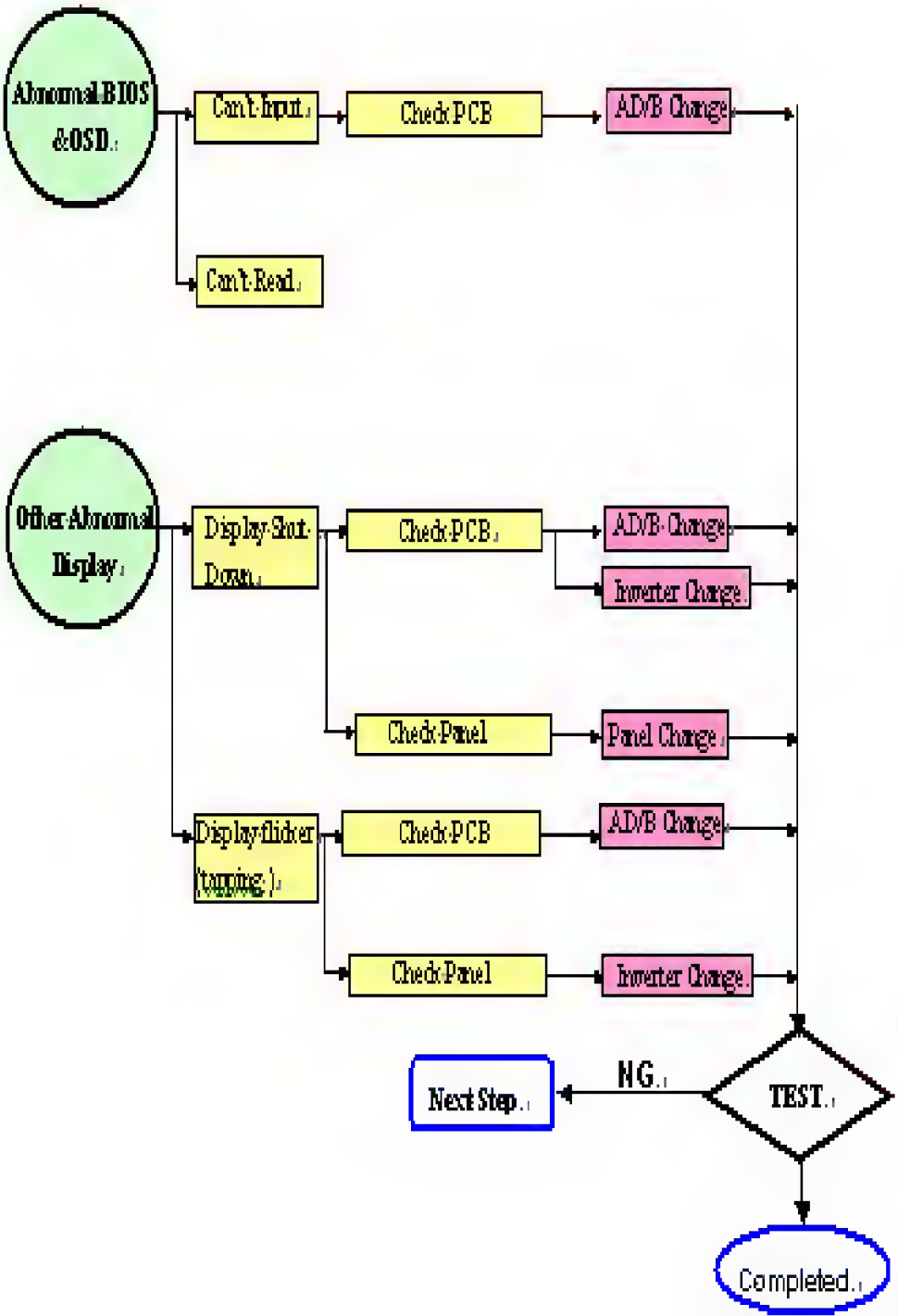

A
"Panel Change" Should be Performed to Level 3 Repair stage.
Flicker
Check PCB
A/D/B Change
Inverter Change
Check OSD
Adjust VCOM
Gray value display
Check PCB
A/D/B Change
Check Panel
Panel Change
R.G.B display abnormal
Check PCB
A/D/B Change
Display Shut Down
Check PCB
A/D/B Change
Inverter Change
Check Panel
Panel Change
No signal
Check PCB
A/D/B Change
Power on Display abnormal
Check PCB
A/D/B Change
TEST
NG
Next Step
A
Completed

4.2 Abnormal (ON/OFF, LCD display, Keyboard) Troubleshooting



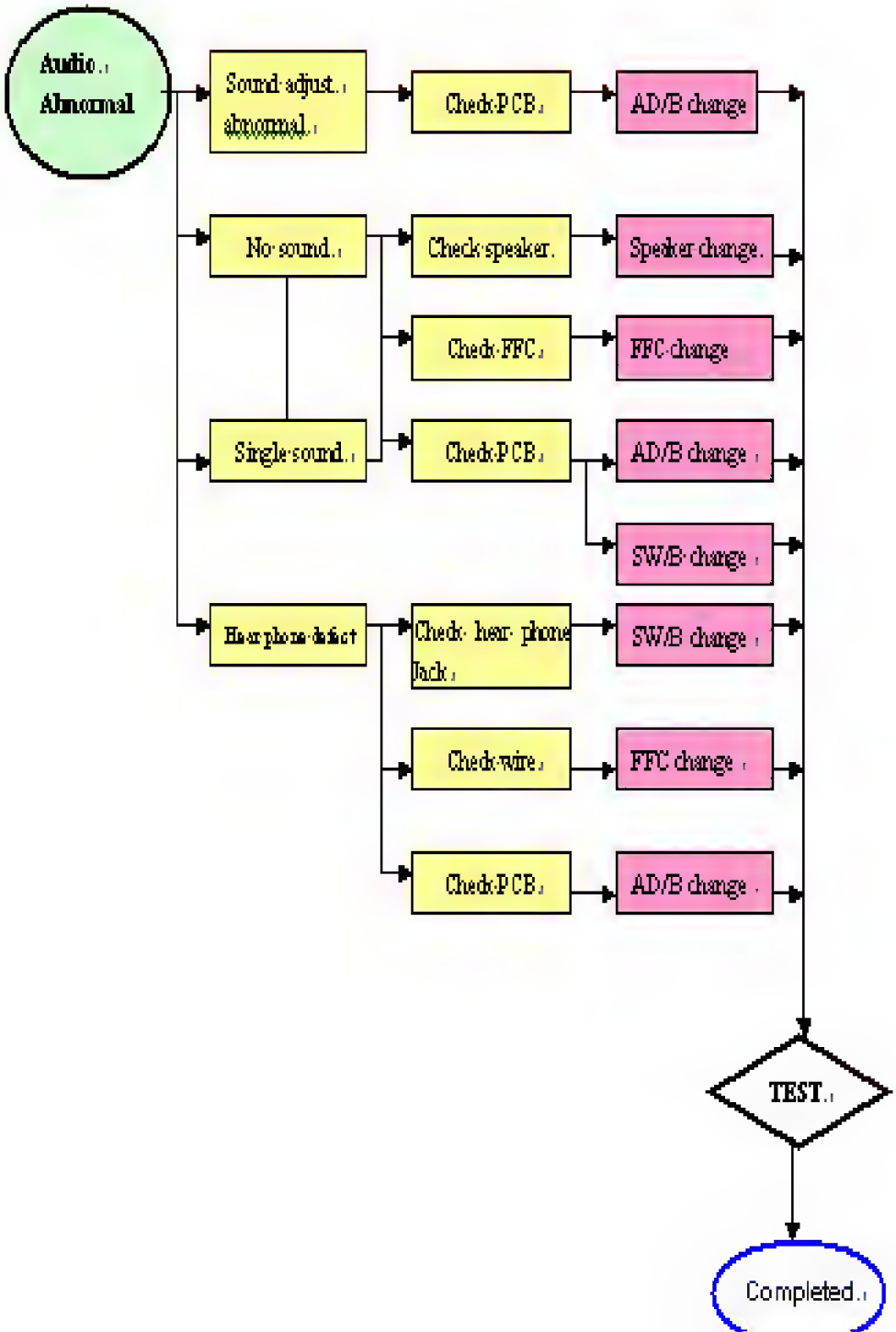
4.3 Abnormal (BIOS, OSD, Other Display) Troubleshooting

※ "Panel Change" Should be Performed at Level 3 Repair stage.



4.4 Audio Abnormal Troubleshooting

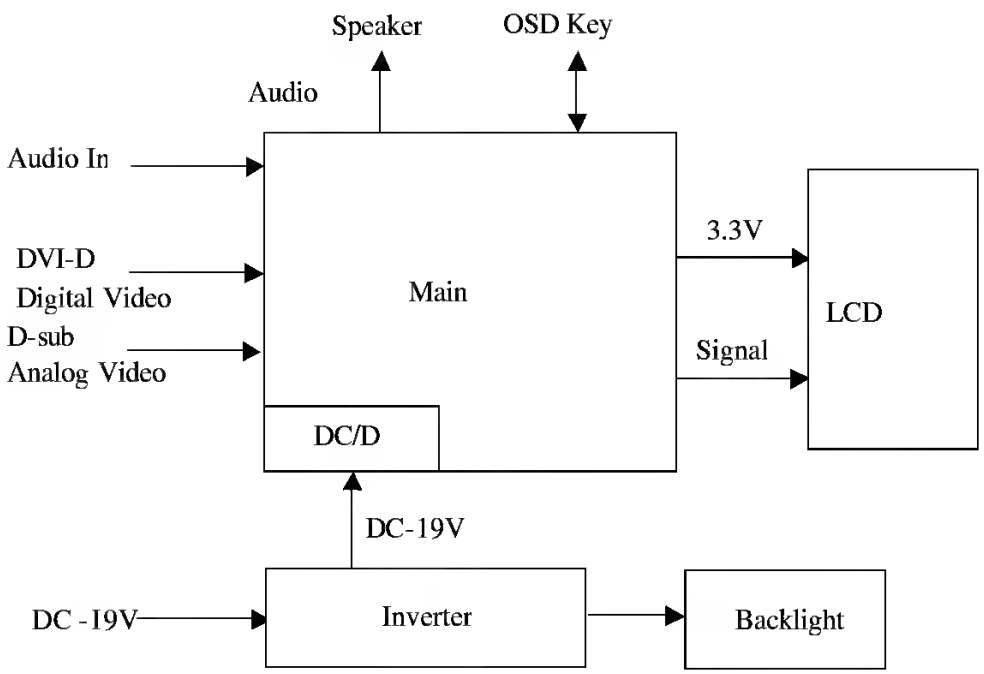
※+"Panel Change" Should be Performed at Level 3 Repair stage.



Connector Information

Chapter 5

5.1 Function Block Diagram



5.2 Connector Location

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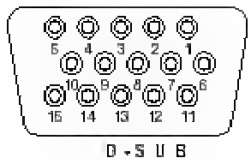
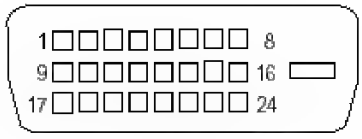
5.3 D-sub Mini 15pin Connector



Pin No.	Pin Function	Pin No.	Pin Function
1	Red video input	9	NC
2	Green video input	10	Ground
3	Blue video input	11	No connection
4	NC	12	DDC data
5	Ground	13	Horizontal sync (Composite sync)
6	Red video ground	14	Vertical sync
7	Green video ground	15	DDC clock
8	Blue video ground		

5.4 DVI-D 24pin Connector



DVI-D

Pin No.	Pin Function	Pin No.	Pin Function
1	T.M.D.S Data 2-	13	NC
2	T.M.D.S Data 2+	14	NC
3	T.M.D.S Data 2 Ground	15	Ground
4	NC	16	Hot Plug Detect
5	NC	17	T.M.D.S Data 0-
6	Clock line (SCL)	18	T.M.D.S Data 0+
7	Data line (SDA)	19	T.M.D.S Data 0 Ground
8	NC	20	NC
9	T.M.D.S Data 1-	21	NC
10	T.M.D.S Data 1+	22	T.M.D.S Clock Ground
11	T.M.D.S Data 1 Ground	23	T.M.D.S Clock+
12	NC	24	T.M.D.S Clock-

5.5 DC Connector

DC Power Jack, d=3.0mm

5.6 Audio Connector (Optional) Phone Jack, d=3.5mm

5.7 Main Board Pin Assignment Introduction

5.7.1 CN1 Pin assignment

Pin No.	Symbol	Description
1	INV_ADJ	Inverter enable
2	INV_ON/OFF	Brightness Adjustment
3	GND	Ground
4	GND	Ground
5	GND	Ground
6	VIN_19V	Input source
7	VIN_19V	Input source
8	VIN_19V	Input source

5.7.2 CN2 Pin assignment

Pin No.	Symbol	Description
1	GND	GROUND
2	GND	GROUND
3	GND	GROUND
4	AUDIO/L-	AUDIO OUTPUT
5	AUDIO/L+	AUDIO OUTPUT
6	AUDIO/R-	AUDIO OUTPUT
7	AUDIO/R+	AUDIO OUTPUT
8	PWR_SW	POWER KEY
9	LED_O	ORANGE LED
10	LED_G	GREEN LED
11	KEY_UP	UP KEY
12	KEY_DOWN	DOWN KEY
13	MENU	MENU KEY
14	AUTO_ADJ	AUTO ADJUSTMENT
15	SOURCE_SEL	INPUT SOURCE SELECTION

5.7.3 CN3 Pin assignment

Pin No.	Symbol	Description
1	XA0	
2	OE	SCAN DATA OUTPUT ENABLE
3	CKV	SCAN IC CLOCK
4	GND	GROUND
5	VGD	SCAN IC VOLTAGE
6	VGD	SCAN IC VOLTAGE
7	PANEL_VGL	PANEL DRIVING VOLTAGE
8	STV	SCAN IC START PULSE
9	PANEL_VGL	PANEL DRIVING VOLTAGE
10	PANEL_VGL	PANEL DRIVING VOLTAGE
11	GND	GROUND
12	PANEL_VGH	PANEL DRIVING VOLTAGE
13	PANEL_VGH	PANEL DRIVING VOLTAGE
14	VCOM	PANEL COMMOM VOLTAGE
15	EB0N	EVEN PATH BLUE DATA BIT
16	EB0P	EVEN PATH BLUE DATA BIT
17	EB1N	EVEN PATH BLUE DATA BIT
18	EB1P	EVEN PATH BLUE DATA BIT
19	EB2N	EVEN PATH BLUE DATA BIT
20	EB2P	EVEN PATH BLUE DATA BIT
21	GND	GROUND
22	POL	POLARITH INVERTING
23	STB	DATA LATCH
24	GND	GROUND
25	ECLKN	EVEN PATH CLOCK
26	ECLKP	EVEN PATH CLOCK
27	GND	GROUND
28	EG0N	EVEN PATH BLUE DATA BIT
29	EG0P	EVEN PATH BLUE DATA BIT
30	EG1N	EVEN PATH BLUE DATA BIT
31	EG1P	EVEN PATH BLUE DATA BIT
32	EG2N	EVEN PATH BLUE DATA BIT

33	EG2P	EVEN PATH BLUE DATA BIT
34	GND	GROUND
35	ER0N	EVEN PATH BLUE DATA BIT
36	ER0P	EVEN PATH BLUE DATA BIT
37	ER1N	EVEN PATH BLUE DATA BIT
38	ER1P	EVEN PATH BLUE DATA BIT
39	ER2N	EVEN PATH BLUE DATA BIT
40	ER2P	EVEN PATH BLUE DATA BIT
41	ESTH	EVEN PATH RED DATA BIT
42	GND	GROUND
43	VSD	DATA IC VOLTAGE
44	VSD	DATA IC VOLTAGE
45	VSD	DATA IC VOLTAGE

5.7.4 CN4 Pin assignment

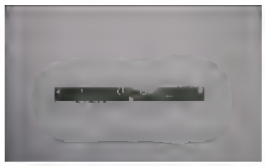
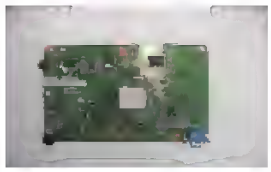
Pin No.	Symbol	Description
1	VCOM	PANEL COMMOM VOLTAGE
2	VCOM	PANEL COMMOM VOLTAGE
3	VCOM	PANEL COMMOM VOLTAGE
4	GND	GROUND
5	GND	GROUND
6	OB0N	ODD PATH BLUE DATA BIT
7	OB0P	ODD PATH BLUE DATA BIT
8	OB1N	ODD PATH BLUE DATA BIT
9	OB1P	ODD PATH BLUE DATA BIT
10	OB2N	ODD PATH BLUE DATA BIT
11	OB2P	ODD PATH BLUE DATA BIT
12	GND	GROUND
13	OCLKN	ODD PATH CLOCK
14	OCLKP	ODD PATH CLOCK
15	GND	GROUND
16	GMA1	GAMMA VOLTAGE
17	GMA2	GAMMA VOLTAGE
18	GMA3	GAMMA VOLTAGE
19	GMA4	GAMMA VOLTAGE
20	GMA5	GAMMA VOLTAGE
21	VSA	DATA IC VOLTAGE
22	VSA	DATA IC VOLTAGE

23	VSA	DATA IC VOLTAGE
24	VSA	DATA IC VOLTAGE
25	VSA	DATA IC VOLTAGE
26	GMA6	GAMMA VOLTAGE
27	GMA7	GAMMA VOLTAGE
28	GMA8	GAMMA VOLTAGE
29	GMA9	GAMMA VOLTAGE
30	GMA10	GAMMA VOLTAGE
31	GND	GROUND
32	OG0N	ODD PATH GREEN DATA BIT
33	OG0P	ODD PATH GREEN DATA BIT
34	OG1N	ODD PATH GREEN DATA BIT
35	OG1P	ODD PATH GREEN DATA BIT
36	OG2N	ODD PATH GREEN DATA BIT
37	OG2P	ODD PATH GREEN DATA BIT
38	GND	GROUND
39	OR0N	ODD PATH GREEN DATA BIT
40	OR0P	ODD PATH GREEN DATA BIT
41	OR1N	ODD PATH GREEN DATA BIT
42	OR1P	ODD PATH GREEN DATA BIT
43	OR2N	ODD PATH GREEN DATA BIT
44	OG2P	ODD PATH GREEN DATA BIT
45	OSTH	ODD PATH STAR PULSE

FRU (Field Replaceable Unit) List

Chapter 6

Part List

Picture	Partname	Description	Vendor Part No.
	Adapter (Black)	ADAPTER 3.42A 65W 3PIN BLACK	2719065193
	FUNCTION BUTTON BOARD	PCBA FOR A190E2	35A19K0205
	INVERTER BOARD	INVERTER BOARD TWS-444-983	2714000022
	Main Board	AL1913 MAINBOARD	35A19S0203
	CABLE	FFC AD-OSD,15PIN,PITCH1.0MM,A190E2-H04	3241900006

	CABLE	FFC_X, A190E2,45PIN,60X23M M,PITCH=0.5MM	3241902003
	MONITOR CABLE (BLACK)	MONITOR CABLE,180CM, BLACK	32F3018003
	AUDIO CABLE (BLACK)	AUDIO CABLE,180CM,BLACK	32F2818004

Picture	Part name	Description	Vendor Part No.
	STAND BASE	ABS, Black,	40A1992212
	LCD FRONT BEZEL	Bezel Assy, W/SPK, BLACK	40A1922913
	LCD BACK COVER	Rear Assy, W/AUDIO,BLACK	40A1992208
	LCD STAND NECK	STAND ASSY,BLACK	40A1992211

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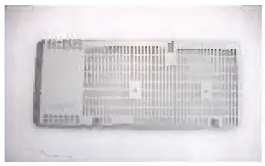
	Hinge Cover	COVER HINGE,BLACK	40A1992206
	MAINBOARD COVER	COVER AD,A190E2	41A1999106

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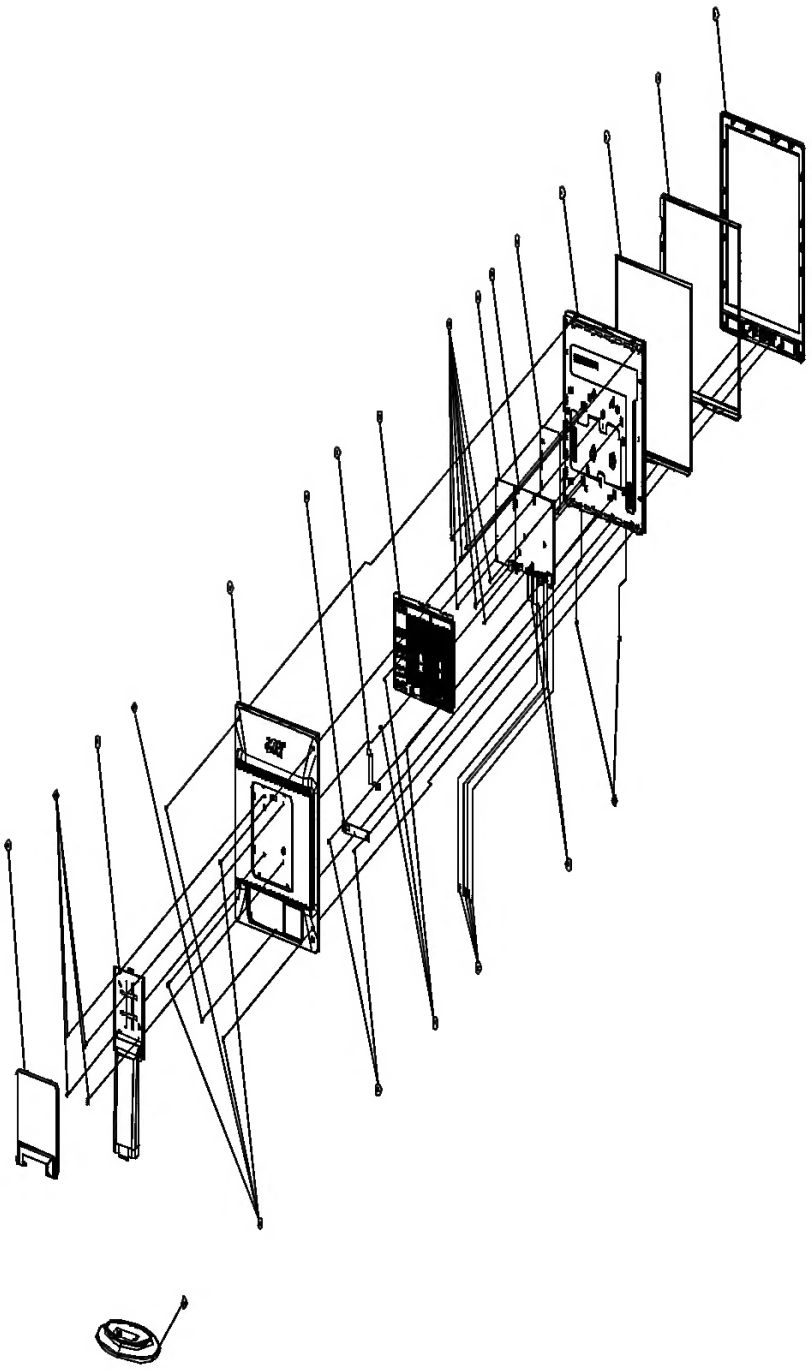

Item	Part Name	QTY
23	SEAT ASSY	1
22	COVER HINGE	2
21	SCREW M4×8L	4
20	STAND ASSY	1
19	SCREW M4×8L	1
18	SCREW M3×6L	4
17	REAR ASSY	1
16	SCREW M3×8L	2
15	KEY PCB ASSY	1
14	LCD FFC	1
13	SCREW M3×4L	3
12	STAND OFF	4
11	COVER AV	1
10	SCREW M3×4L	6
9	FFC	2
8	AV PCB ASSY	1
7	POWER PCB ASSY	1
6	W1AM INVERTER	1
5	SCREW M3×6L	2
4	MOUNT UNIT	1
3	TFT PANEL ASSY	1
2	PANEL FRAME FRONT	1
1	LCD ASSY	1

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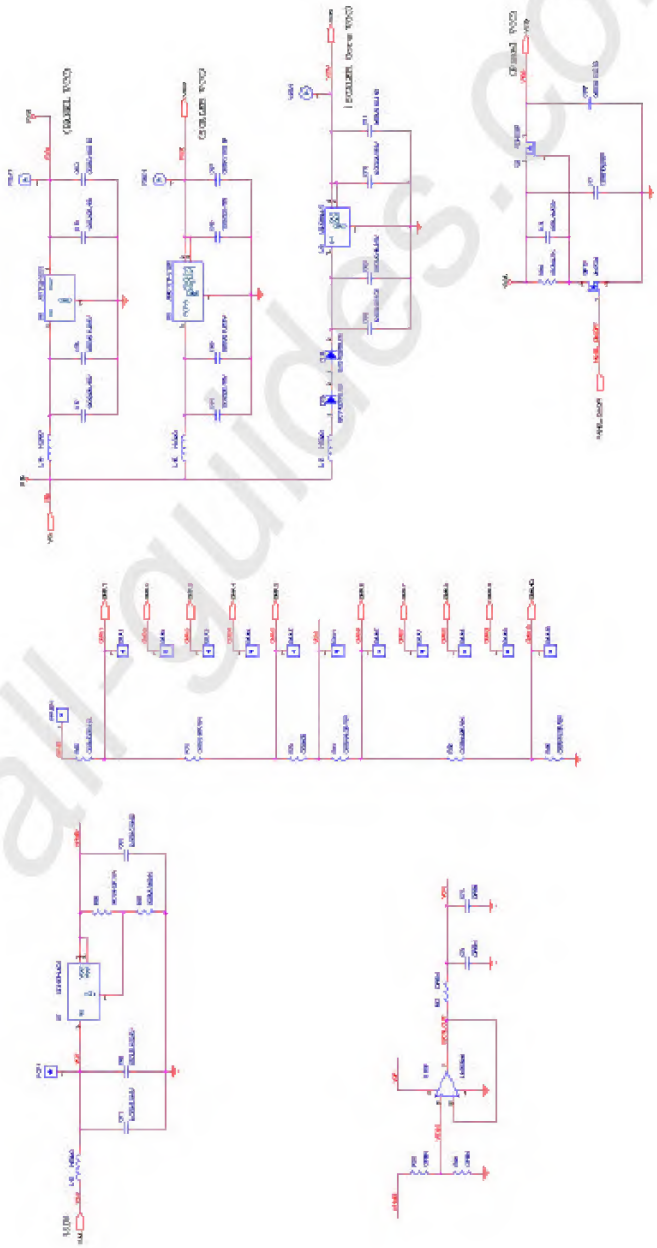
Schematic Diagram

Chapter 7

Main Board



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